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An Environment-friendly Fabrication of Superhydrophobic Surfaces on Steel and Magnesium alloy

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Abstract

A novel and environment-friendly approach has been conducted to render low carbon steel and magnesium alloy surface superhydrophobic (SH) *via* salt spray and modification. Surface morphology, chemical composition and wettability were respectively investigated with SEM, EDS, XPS and water contact angle measurement. The results indicated that both of the surfaces generated hierarchical micro/nanometer-scale structure induced by electrochemical reactions during salt spray, which showed desirable durability measured by waterfall/jet. This means the

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